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| EXAMINER |
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PWU, JEFFREY C

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2143

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/702,160             | HARROP, THOMAS C.   |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Jeffrey C. Pwu         | 2143                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/6/2006 A.B.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 and 55-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-53 and 55-58 is/are rejected.
- 7) ☒ Claim(s) 14, 21, 36, 58 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. The Final rejection of claims 1-53 and 55-58 over Brockel et al. is hereby withdrawn in view of applicant's Appeal Brief filed 9/6/06 and newly discovered prior art. Any inconvenience is regretted.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is vague and indefinite because it is unclear what is/are the concrete step(s) or result needed in order to predict a future network-wide performance problem.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-53 and 55-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Brockel et al. (U.S. 6,058,260).

As broadly drafted, claims 1-52 and 55-58 do not define any structure/step that differs from Natarajan et al. (US 6,765,864)

Natarajan et al. teach:

Claim 1: A method of managing a network comprising the steps of:

▶polling resources of the network to gather real-time status information about the network;

(Abstract: “a portion of the **network elements report operating information relating to network conditions to a centralized data store**. The information which is reported to the data store is analyzed by a policy engine which includes a plurality of application specific plug-in policies for analyzing selected information from the data store and for computing updated control information based upon the analysis of the information. The updated control information is fed back to selected network elements to thereby affect operation of the selected elements. Additionally the adaptive, **feedback-based network of the present invention may include a network quality monitoring system for evaluating performance characteristics or other aspects of the network based upon predetermined standards or criteria.**”)

▶evaluating performance of the network by identifying network-wide patterns in the gathered real-time status information; and (Abstract)

▶based on the result of said step of evaluating, providing a prediction of a future network-wide performance problem. (At col.3, line 18- “a monitoring system for providing **dynamic feedback control of network elements in a data network**. Each of the network elements has a plurality

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of operating parameters associated therewith. The operating parameters associated with a particular network element are related to at least one control parameter of that element. The network further includes **a policy engine having at least one policy for analyzing information from selected network elements and dynamically generating updated control information used to affect at least one aspect of network performance.** The monitoring system comprises at least one CPU, memory, and at least one interface for retrieving information related to a first subset of network elements. The monitoring system is operable to analyze at least a portion of the retrieved information to determine whether the policy is effective in causing at least one aspect of network performance to conform with predefined performance criteria. **The monitoring system is further operable to cause the policy to be modified in response to a determination that the policy is not effective in affecting the aspect of network performance to conform with the predefined performance criteria.**” – therefore providing a prediction of a future network-wide performance problem)

Claim 2: The method of claim 1 further comprising the step of: determining an action for preventing the future network-wide performance problem from occurring. (col.3, lines 15-36 – **“determination that the policy is not effective in affecting the aspect of network performance to conform with the predefined performance criteria.”**)

Claim 3: The method of claim 2 wherein said determining step includes determining the action from at least one previously defined rule. (see “policy engine”)

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Claim 4: The method of claim 2 further comprising the step of:

initiating the said action before the future network-wide performance problem occurring in an attempt to prevent the future network-wide performance problem. (col.3, lines 15-col.4, line 3)

Claim 5: The method of claim 1 wherein said step of evaluating performance of the network further includes: correlating the real-time, status information with at least one previously defined rule. (@col.21, line 53- **“the adaptive network relies on a policy engine that uses real-time network data (e.g. state data) to make policy decisions for generating updated network control parameters to thereby effect changes in the network.** Where the network data to be analyzed is obtained from the data store, it is important that the data in the data store be up-to-date at all times. In order for the data to be up-to-date, a notification scheme is provided both from the network element(s) to the data store, and from the data store to the network element(s).”

Claim 6: The method of claim 5 wherein the at least one previously-defined, rule defines a known pattern for the gathered real-time status information that foreshadows the occurrence of the future network-wide performance problem. (see “policy engine”)

Claim 7: The method of claim 1 wherein the future network-wide performance problem is caused by anyone or more of the problems selected from:

operability problem of the resources of the network operability problem of the network,

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failure of the resources of the network, failure of the network, integrity problem of the resources of the network integrity problem of the network, efficiency problem of the resources of the network, efficiency problem of the network, decreased processing speed of the resources of the network, decreased processing speed of the network, usage capacity problem of the resources of the network, and usage capacity problem of the network. (276A; “The predetermined criteria may be related to desired quality characteristics of the network, predetermined Service Level Agreement parameters, fault management performance, network security, billing information, etc. The results of the analysis are then automatically reported to an administrator or administration system for handling, and/or responding to the reported results.” @col.2, line 15-col.4, line 17)

Claim 8: The method of claim 1 wherein said step of polling resources includes gathering the real-time status information for anyone or more of: network status, disk status, database status, memory status, CPU status, and operating system status. (“a monitoring system for providing dynamic feedback control of network elements in a data network. Each of the network elements has a plurality of operating parameters associated therewith. The operating parameters associated with a particular network element are related to at least one control parameter of that element. The monitoring system comprises at least one **CPU, memory, and at least one interface for retrieving information related to a first subset of network elements. The monitoring system is operable to analyze at least a portion of the retrieved information based upon selected guidelines to determine whether a performance of at least a portion of the network conforms with predetermined criteria.** The monitoring system is further operable to report the

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results of the analysis to an administrator or an administration system for responding to the reported results.” @col.2, line 15-col.4, line 17)

Claim 9: The method of claim 1 wherein said step of polling resources gathering step includes gathering the real-time status information by a plurality of distributed gateways that are communicatively coupled to a central management system. (“**the network element 204A of FIG. 2** may be a router, such as the router 10 illustrated in FIG. 5A of the drawings. Referring to FIG. 5A, a router 10 is shown which may includes a **master central processing unit (CPU) 62**, interfaces 68, and a bus 15 (e.g., a PCI bus). When acting under the control of appropriate software or firmware, the CPU 62 is responsible for such router tasks as routing table computations and network management. It may also be responsible for reporting operating information (relating to the router 10) to one or more external devices, retrieving new or updated control information from an external data source, caching the retrieved control information, receiving event notification messages, generating event messages (relating to the status of router 10), etc. CPU 62 preferably accomplishes all these functions under the control of software including an operating system (e.g., the Internetwork Operating System (IOS.RTM.) of Cisco Systems, Inc.) and any appropriate applications software. CPU 62 may include one or more processors 63 such as a processor from the Motorola family of microprocessors or the MIPS family of microprocessors. In an alternative embodiment, processor 63 is specially designed hardware for controlling the operations of router 10. In a specific embodiment, a memory 61 (such as non-volatile RAM and/or ROM) also forms part of CPU 62. However, there are many different ways in which memory could be coupled to the system. Memory block 61 may be used



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for a variety of purposes such as, for example, caching and/or storing data, programming instructions, etc.”)

Claim 10: The method of claim 3 wherein said-providing the at least one previously defined rule includes at least one user defined rule. (see “policy engine”)

Claim 11: The method of claim 3 wherein the at least one previously defined rule is implemented as software code executing on a management system. (see “policy engine”)

Claim 12: The method of claim 3 further comprising: the at least one previously defined rule correlating disparate network elements. (see “policy engine”)

Claim 13: The method of claim 3 further comprising: the at least one previously defined rule correlating disparate characteristics of the resources of the network. (see “policy engine”)

Claim 15: A system for managing a network, said system comprising:

▶ at least one polling gateway that is operable to poll one or more network elements to gather real-time status information for said one or more network elements; (“**In the network of FIG. 2, network element 204A may be any hardware or software component which has a measurable parameter that can be reported. Examples of network elements include routers,**

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switches, hosts, modems, terminals, dial access servers, **gateways**, ports, channels, interfaces, circuits, processes, drivers, protocols, services, applications, etc”)

▶ at least one processor-based management server communicatively coupled to the at least one polling gateway to receive the gathered real-time status information from said at least one polling gateway; and the at least one processor-based management server predicting the occurrence of a network-wide performance problem within the network based on the gathered real-time status information. (claim 15 is similarly rejected as in claim 1)

Claim 16: The system of claim 15 wherein said one or more network elements include a plurality of network elements distributed in the network. (204A; col.38, lines 15-25)

Claim 17: The system of claim 15 wherein said one or more network elements include a plurality of disparate network elements. (col.38, lines 15-25)

Claim 18: The system of claim 15 wherein said at least one polling gateway includes a plurality of distributed polling gateways. (col.38, lines 15-25)

Claim 19: The system of claim 15 wherein said plurality of distributed polling gateways include polling gateways that are each operable to poll particular ones of disparate network elements. (col.38, lines 15-59)

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Claim 20: The system of claim 19 wherein said disparate network elements include network elements that communicate in different network protocols. (col.38, lines 15-25)

Claim 22: The system of claim 15 wherein at least one rule defines an action for said at least one processor-based management server to respond to a defined condition being detected. (see “policy engine”)

Claim 23: The system of claim 22 wherein said action is an action for attempting to prevent the network-wide performance problem predicted by the detection of said defined condition from occurring. (see “policy engine”)

Claim 24: The system of claim 22 wherein upon detection of said defined condition, said at least one processor-based management server initiates said action before said network-wide performance problem occurring. (At col.3, line 18- “a monitoring system for providing **dynamic feedback control of network elements in a data network**. Each of the network elements has a plurality of operating parameters associated therewith. The operating parameters associated with a particular network element are related to at least one control parameter of that element. The network further includes a **policy engine having at least one policy for analyzing information from selected network elements and dynamically generating updated control information used to affect at least one aspect of network performance**. The monitoring system comprises at least one CPU, memory, and at least one interface for retrieving information related to a first

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subset of network elements. The monitoring system is operable to analyze at least a portion of the retrieved information to determine whether the policy is effective in causing at least one aspect of network performance to conform with predefined performance criteria. **The monitoring system is further operable to cause the policy to be modified in response to a determination that the policy is not effective in affecting the aspect of network performance to conform with the predefined performance criteria.**” – therefore providing a prediction of a future network-wide performance problem)

Claim 25: The system of claim 15 wherein at least one rule defines a known pattern for status information that foreshadows the occurrence of said network-wide performance problem. (At col.3, lines 18-39)

Claim 26: The system of claim 15 wherein at least one rule defines statistical analysis of said status information that foreshadows the occurrence of said network-wide performance problem. (“the frame relay policy plug-in 254c may include a first policy for controlling the CIR parameter of a frame relay circuit, and may include a second policy for controlling the EIR parameter of a frame relay circuit. Each policy contains a specific set of rules for analyzing specific information from selected network elements, and for generating updated control information in response to the analysis of the gathered information. The policy may include protocol specific rules, business logic rules, event notification rules, etc. Further, as described in greater detail below, the policies may be dynamically re-configured during run-time, meaning

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that a specific policy may be dynamically modified in situations, such as, for example, where it is determined that the current policy for controlling an aspect of network performance is ineffective.”)

Claim 27: The system of claim 15 wherein at least one rule defines a known correlation of status information that foreshadows the occurrence of said network-wide performance problem. (see “policy engine”)

Claim 28: The system of claim 15 wherein said network-wide performance problem is caused by anyone or more of the problems selected from: operability problem of said one or more network elements, operability problem of the network, failure of said one or more network elements, failure of the network, integrity problem of said one or more network elements, integrity problem of the network, efficiency problem of said one or more network elements, efficiency problem of the network, decreased processing speed of said one or more network elements, decreased processing speed of the network, usage capacity problem of said one or more network elements, and usage capacity problem of the network. @col.2, line 15-col.4, line 17)

Claim 29: The system of claim 15 wherein said status information includes one or more from: network status, disk status, database status, memory status, CPU status, and operating system status. (“The policy engine 254 is a decision-making (logical) component of the feedback-based

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adaptive network of the present invention. An example of a policy engine 254 is illustrated in FIG. 5C of the drawings. As shown in FIG. 5C, the policy engine 254 includes a policy server 254a, a CPU 254g (which may reside at the policy server or other device), an event handling entity 254f, and a plurality of application specific plug-in policies 254b-e. An application specific policy is decision tree that allows the policy server to make a decision based upon measured variables and conditions. The definition of "policy" varies based upon the perspective of the user. In the case of management and control of network elements, a policy is a corrective action which is used to restore the network element to a pre-determined state.”)

Claim 30: A management system for managing one or more layers of a network, wherein said managing includes predicting network-wide performance problems that are to occur within one or more layers of the network and taking responsive actions in an attempt to prevent or timely respond to the predicted said network-wide performance problems, said management system comprising: at least one processor-based management server communicatively coupled to at least one polling gateway that is operable to poll at least one network element to gather real-time status information for said at least one network element; the at least one processor-based management server including software code executing thereon, wherein said software code learns a condition for predicting said network-wide performance problem within one or more layers of the network from said gathered real-time status information to enable the processor-based management server to predict the occurrence of said network-wide performance problem within the network. (Claim 30 is similarly rejected as in claim 1)

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Claim 31: The management system of claim 30 wherein said at least one network element include a plurality of said at least one network element elements distributed in the network.

(204A)

Claim 32: The management system of claim 30 wherein said at least one network element elements include a plurality of disparate said at least one network element elements. ("The policy engine 254 is a decision-making (logical) component of the feedback-based adaptive network of the present invention. An example of a policy engine 254 is illustrated in FIG. 5C of the drawings. As shown in FIG. 5C, the policy engine 254 includes a policy server 254a, a CPU 254g (which may reside at the policy server or other device), an event handling entity 254f, and a plurality of application specific plug-in policies 254b-e. An application specific policy is decision tree that allows the policy server to make a decision based upon measured variables and conditions. The definition of "policy" varies based upon the perspective of the user. In the case of management and control of network elements, a policy is a corrective action which is used to restore the network element to a pre-determined state.")

Claim 33: The management system of claim 30 wherein said at least one polling gateway includes a plurality of distributed polling gateways. ("FIG. 2, network element 204A may be any hardware or software component which has a measurable parameter that can be reported. Examples of network elements include routers, switches, hosts, modems, terminals, dial access servers, gateways, ports, channels, interfaces, circuits, processes, drivers, protocols, services, applications, etc")

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Claim 34: The management system of claim 30 wherein said plurality of distributed polling gateways include polling gateways that are each operable to poll particular ones of disparate said at least one network element elements. (see method steps of 1201-1216 in fig.12)

Claim 35: The management system of claim 34 wherein the disparate said at least one, network element elements include said at least one network element elements that communicate in different network protocols. . (“FIG. 2, network element 204A may be any hardware or software component which has a measurable parameter that can be reported. Examples of network elements include routers, switches, hosts, modems, terminals, dial access servers, gateways, ports, channels, interfaces, circuits, processes, drivers, protocols, services, applications, etc”)

Claim 37: The management system of claim 30 wherein at least one rule defines an action for said at least one processor-based management server to take in response to said condition being detected. (see “policy engine”)

Claim 38: The management system of claim 37 wherein said action is an action for attempting to prevent the network-wide performance problem predicted by the detection of said condition from occurring. (Abstract; col.3, line 18- “a monitoring system for providing **dynamic feedback control of network elements in a data network**. Each of the network elements has a plurality of operating parameters associated therewith. The operating parameters associated with a particular network element are related to at least one control parameter of that element. The



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network further includes **a policy engine having at least one policy for analyzing information from selected network elements and dynamically generating updated control information used to affect at least one aspect of network performance.** The monitoring system comprises at least one CPU, memory, and at least one interface for retrieving information related to a first subset of network elements. The monitoring system is operable to analyze at least a portion of the retrieved information to determine whether the policy is effective in causing at least one aspect of network performance to conform with predefined performance criteria. **The monitoring system is further operable to cause the policy to be modified in response to a determination that the policy is not effective in affecting the aspect of network performance to conform with the predefined performance criteria.”** – therefore providing a prediction of a future network-wide performance problem)

Claim 39: The management system of claim 37 wherein upon detection of said defamed condition said at least one processor-based management server initiates said action before said network-wide performance problem occurs.

Claim 40: The management system of claim 30 wherein said learned condition includes a pattern for status information that foreshadows the occurrence of said network-wide performance problem. (fig.3)

Claim 41: The management system of claim 30 wherein said learned condition includes

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statistical analysis of said status information that foreshadows the occurrence of said network-wide performance problem. (see “policy engine analysis procedure 1100”)

Claim 42: The management system of claim 30 wherein said learned condition includes correlation of status information that foreshadows the occurrence of said network-wide performance problem. (1134, 1136)

Claim 43: The management system of claim 30 wherein said network-wide performance problem is caused by anyone or more of the problems selected from:

operability problem of said at least one network element, operability problem of the network, failure of said at least one network element, failure of the network, integrity problem of said at least one network element, integrity problem of the network, efficiency problem of said at least one network element, efficiency problem of the network, decreased processing speed of said at least one network element, decreased processing speed of the network, usage capacity problem of said at least one network element, and usage capacity problem of the network. (204A)

Claim 44: The management system of claim 30 wherein said status information includes one or more from: network status, disk status, database status, memory status, CPU status, and operating system status. (database status, memory status, CPU status, and operating system status)

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Claim 45: The management system of claim 30 wherein said at least one network element is represented as an object within object-oriented software executing on the processor-based server, said object having one or more attributes for which said status information may be gathered. (“event notification service is implemented using a standardized common object request broker architecture (CORBA)”)

Claim 46: The management system of claim 45 wherein said condition includes correlation of one or more attributes of one or more objects to define the prediction of said network-wide performance problem. (270; COBRA)

Claim 47: The management system of claim 30 wherein said management system includes a business management layer. (“Each application specific plug-in policy module may include one or more policies. For example, the frame relay policy plug-in 254c may include a first policy for controlling the CIR parameter of a frame relay circuit, and may include a second policy for controlling the EIR parameter of a frame relay circuit. Each policy contains a specific set of rules for analyzing specific information from selected network elements, and for generating updated control information in response to the analysis of the gathered information. The policy may include protocol specific rules, business logic rules, event notification rules, etc. Further, as described in greater detail below, the policies may be dynamically re-configured during run-time, meaning that a specific policy may be dynamically modified in situations, such as, for example, where it is determined that the current policy for controlling an aspect of network performance is

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ineffective.”)

Claim 48: The management system of claim 47 wherein said **network-wide performance problem includes a business performance problem**. (“Each application specific plug-in policy module may include one or more policies. For example, the frame relay policy plug-in 254c may include a first policy for controlling the CIR parameter of a frame relay circuit, and may include a second policy for controlling the EIR parameter of a frame relay circuit. Each policy contains a specific set of rules for analyzing specific information from selected network elements, and for generating updated control information in response to the analysis of the gathered information. The policy may include protocol specific rules, **business logic rules**, **event notification rules**, etc. Further, as described in greater detail below, the policies may be dynamically re-configured during run-time, meaning that a specific policy may be dynamically modified in situations, such as, for example, where it is determined that the current policy for controlling an aspect of network performance is ineffective.”)

Claim 49: The management system of claim 48 wherein said at least one network element includes an electronic commerce system for processing commercial transactions with customers via the Internet, and wherein said business performance problem includes a problem resulting in inability of said electronic commerce system processing said commercial transactions. (“Each application specific plug-in policy module may include one or more policies. For example, the frame relay policy plug-in 254c may include a first policy for controlling the CIR parameter of a

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frame relay circuit, and may include a second policy for controlling the EIR parameter of a frame relay circuit. Each policy contains a specific set of rules for analyzing specific information from selected network elements, and for generating updated control information in response to the analysis of the gathered information. The policy may include protocol specific rules, **business logic rules, event notification rules, etc. Further, as described in greater detail below, the policies may be dynamically re-configured during run-time, meaning that a specific policy may be dynamically modified in situations**, such as, for example, where it is determined that the current policy for controlling an aspect of network performance is ineffective.”)

Claim 50: The management system of claim 30 wherein said management system includes a service management layer. (Abstract)

Claim 51: The management system of claim 50 wherein said network-wide performance problem includes a service performance problem. (Abstract)

Claim 52: The management system of claim 51 wherein said service performance problem includes problem with the Quality provided to subscribers or clients of the managed network. (See “SLA”)

Claim 53: The management system of claim 30 wherein said management system includes a network management layer. (Abstract)

Claim 55: The management system of claim 30 wherein said management system includes an element management layer (204A, 204B)

Claim 56: The management system of claim 55 wherein said network-wide performance problem includes a network element performance problem. (270; 204A, 204B)

Claim 57: The management system of claim 30 wherein said management system includes a plurality of at least the following layers: business management layer, service management layer, network management layer, and element management layer, and wherein a plurality of said layers are correlated within said at least one rule. (See “Policy engine” and “SLA”)

***Allowable Subject Matter***

5. Claims 14, 21, 36, and 58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-53 and 55-56 have been considered but are moot in view of the new ground(s) of rejection. Applicants' arguments filed 1/5/06 have been fully considered but they are not persuasive.

7. Applicants are reminded that claims subject to examination will be given their broadest reasonable interpretation consistent with the specification. In re Morris, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997,). As a matter of fact, the "examiner has the duty of police claim language by giving it the broadest reasonable interpretation." Springs Window Fashions LP v. Novo Industries, L.P., 65 USPQ2d 1862, 1830, (Fed. Cir. 2003). Applicants are also reminded that claimed subject matter not the specification, is the measure of the invention. Disclosure contained in the specification cannot be read into the claims for the purpose of avoiding the prior art. In re Sporck, 55 CCPA 743, 386 F.2d, 155 USPQ 687 (1986).

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

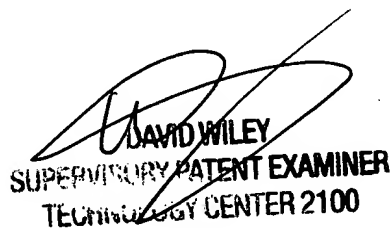
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey C. Pwu whose telephone number is 571-272-6798. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



11/26/06

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